

Enforcing U.S. Marine Protected Areas: Synthesis Report



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Supporting a National MPA System...

- MPA Center Goals (Exec. Order 13158)
 - Develop framework for national system of MPAs
 - Improve MPA stewardship and effectiveness
 - Facilitate national and regional coordination of MPA activities
- “identification of...effective enforcement strategies...”

Enforcement is Critical to MPA Success

- Can be more difficult than land-based counterparts
 - Unseen boundaries
 - Unlimited # of entry points
 - Incomplete information on marine resources
- Can be costly
 - “At-Sea” enforcement
 - Technologies
- Can be easier & less expensive than traditional management approaches
 - Species-specific regulations, gear-based regulations, etc.

Enforcement Synthesis

Objectives of the Report

1. Summarize existing **literature** relevant to MPA enforcement
2. Provide improved clarity w/ respect to **institutional arrangements** for MPA enforcement
3. Highlight issues in MPA-related **case law**
4. Examine a range of perspectives on current enforcement **issues and recommendations**

Study Approach

Summer 2004

- **Methods**

- Literature Review – MPA Center Library at NOAA CSC
- Case Law – National Sea Grant Law Center & NOAA GCEL
- Case studies – FKNMS, CIMPAs, Oculina Bank HAPC
- “National-level” interviews

- **Interviewees (75):**

- Coastal/Marine resource managers
- Attorneys
- Enforcement personnel
- Education/Outreach specialists
- User communities

Section 1: Literature Review

- Central goal of enforcement programs is compliance.
- So, how is compliance achieved for MPAs?
 - Limited MPA-related compliance studies
 - Wealth of fisheries compliance studies

Compliance:

General Deterrence Theory

- Simple equation:
 - Payoff
 - Likelihood of detection
 - Severity of penalties
- For MPAs:
 - High payoff (*poachers paradise*), depending on status of the fishery
 - Likelihood of detection? In many cases very low...
 - Authorized penalties can be severe, not always invoked for resource violations...

Compliance:

Normative Compliance Theory

- Yet most folks comply. Why?
 - 80 – 15 – 5
- Social Psychology
 - Perceived *legitimacy* of management
 - *Morality*
 - *Social Pressures* (to comply or not to comply)
 - *Self-Interest* (belief in fishery recovery)
 - *Behavior of Others* (general compliance)
 - *Habits*

Normative Compliance Theory: *Legitimacy*

- Could be most important “normative” factor
 - Content of Goals/Regulations
 - *Simple, consistent, practical*
 - Distributional Effects
 - *For example, recreational vs. commercial*
 - Procedural Fairness
 - *Transparency*
 - *Stakeholder Involvement (bottom-up approaches)*

Section 2.

Institutional Arrangements - MPA Enforcement

If you designate it, who will come?

- Wide variety of MPA types = wide variety of enforcement entities
- Complex at the federal level, even more complex at the state level.

Institutional Arrangements - MPA Enforcement

Federal

MSA, ESA, NMSA:

- **US Coast Guard**

- Multi-mission, now in DHS
- Greatest on-water presence (40,000 personnel)
- Historically greatest role in fisheries enforcement

- **NOAA Fisheries Office for Law Enforcement**

- 147 Special Agents, 17 Officers, 20-30 RHI vessels
- Coordination role; investigations of major violations

Institutional Arrangements:

Federal

- **National Park Service**
 - 41 Parks, Seashores, Monuments w/ marine components
 - Enforcement assets vary by site
- **US Fish and Wildlife Service**
 - 162 National Wildlife Refuges w/ marine components
 - Enforcement assets vary by site

Institutional Arrangements: ***State/Territory***

- Vary widely and more complex:
 - Fisheries mgmt, habitats, endangered species;
also regulate coastal developments/alterations
- Marine enforcement through:
 - State marine patrols (same as state police)
 - Marine Fisheries (or Wildlife) Division
 - In some cases, state supports local enforcement

Institutional Arrangements: *Enforcement Partnerships*

- Cooperative Enf. Agreements (NOAA OLE)
 - Formalize partnership/deputize state officers to enforce specific federal laws
- Joint Enf. Agreements (NOAA Fisheries OLE)
 - Provide financial support to states to address specific federal enforcement priorities under the CEA
 - Increase state enforcement assets
 - 23 of 29 coastal states/territories (NC soon)
 - Started with SCDNR in 1999

Institutional Arrangements:

Homeland Security Implications

- Natural resource regs. of lower priority for federal & state officers w/ multiple missions.
- Returning to pre 9/11 levels...
- Cup Half Full: Increasing enforcement assets for homeland security could lead to increasing natural resources enforcement...

Section 5. Participant Suggestions

- How do you ensure MPA enforcement given today's other enforcement and security needs?
 - *Targeted Enforcement*: Conduct patrols during holidays, at night, and during bad weather
 - Conduct covert patrols
 - Encourage community self-enforcement
 - Hotlines, cell phone access to officers, follow-up
 - “Team Ocean”, docent, watch group patrols
 - Identify critical resource areas for officers

Remote Enforcement Technologies

- Are we ever going to have enough “at-sea” enforcement presence?
- Are remote technologies the answer?
 - Remote radar, laser buoy lines, remote sensing, video cameras, acoustic sensors
 - Vessel Monitoring Systems (VMS)
 - Expensive, invasive...
 - Only for no-entry?
 - Good for remote MPAs; also valuable in S&R
 - Expanding? (2000 now, 12000+ potential)

Section 5. Participant Suggestions

- How do you promote voluntary compliance?
 - Take advantage of “normative” factors
 - Stakeholder involvement, bottom-up approaches
 - Reduce complexity of regulations
 - Increase officer – community interactions
 - Outreach!!!
 - “Interpretive Enforcement”
 - Target visiting, recreational users at access points
 - Focus outreach not just on value of resources, but of management goals, regulations, and enforcement.

Section 5. Participant Suggestions

To what extent should enforcement considerations play a role in MPA siting and design, as compared with politics, science?

- Often comes in last
- Strategic enforcement planning is needed prior to MPA establishment
 - Enforcement assets and projected funding
 - Past and present use patterns
 - Potential incursions; worst case scenarios
 - Opportunities for targeted enforcement
 - Incentives and disincentives for compliance

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